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Agricultural/Forestal Districts: Surveying AFD Landowners in Augusta County and the
City of Staunton to Determine Areas for Program Improvement and Program Promotion
Strategies
Martin Driver

A thesis submitted to the Graduate Faculty of
JAMES MADISON UNIVERSITY
In
Partial Fulfillment of the Requirements
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Table of Contents

Acknowledgments	ii
List of Tables	v
List of Figures	vi
Abstract	vii
1.0 Introduction.....	1
2.0 The Agricultural/Forestal District Program	2
3.0 Conservation Easements	4
4.0 Localities of Focus	6
5.0 Growth of Conservation Easements in Virginia	11
6.0 AFD Program Benefits for Landowners and Localities	13
7.0 Conservation Easement Benefits for Landowners and Localities	15
8.0 Previous AFD Studies and the Need for Gaining Landowner Perspective	16
9.0 The Landowner Survey.....	20
10.0 Survey Results and Analysis.....	22
11.0 Recent AFD Acreage Activity in Virginia.....	30
12.0 Conclusions and Recommendations	32
Appendix A: Institutional Review Board Approval Notice.....	37
Appendix B: Landowner Survey Consent Form.....	39
Appendix C: Landowner Survey	43

References	46
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List of Tables

Table 1: Status of Agricultural/Forestal Districts in the Shenandoah Valley Region

Table 2: Augusta County Agricultural/Forestal Districts

Table 3: City of Staunton Agricultural/Forestal Districts

Table 4: Primary Methods of AFD Promotion

Table 5: Challenges with AFD Promotion

List of Figures

Figure 1: Geographical Representation of Augusta County Agricultural/Forestal Districts

Figure 2: Virginia Easement Acreage Recorded by Year

Figure 3: Landowner-Perceived AFD Benefits

Figure 4: Landowner-Perceived AFD Drawbacks

Figure 5: Landowner AFD Promotion Suggestions

Figure 6: AFD Acreage Volatility: Comparative Virginia Localities

Abstract

Agricultural/Forestal Districts (AFDs) are rural conservation zones reserved for the production of agricultural products and function to protect agricultural and forestal lands as important natural resources. These districts are formed voluntarily by Virginia landowners and provide a number of important benefits to the landowners and surrounding communities. From a stewardship and administration standpoint, it would benefit both landowners and administrators to determine areas needing improvement within the AFD program. Also, it would be beneficial to these same parties to determine optimal methods for promoting the program to landowners who are not currently AFD members. The evaluation and understanding of these two topics could lead to an increased number of protected agricultural acres in the future as a result of implemented program improvements and improved program promotion. Gaining landowner perspective is the key to making these needed program adjustments. To capture and analyze this perspective, a mailed survey approved by the James Madison University Institutional Review Board was distributed as part of this study. The landowner feedback was used to address the two topics of interest previously mentioned. The survey responses were analyzed and summarized using a descriptive statistics approach. Due to low response rate, no statistical conclusions were drawn from the survey feedback. According to the survey responses received, AFD landowners see the conservation aspect as being the number one program benefit and most did not see the program as having any drawbacks. Word of mouth and scheduled meetings were the top two suggestions for raising program awareness. This study found that the AFD program lacks sufficient incentive to encourage landowner participation. Also, AFDs pale in comparison to the

benefits perpetual conservation easements offer landowners who are financially driven. Subjective conclusions and recommendations originated from both quantitative survey response findings and qualitative data gathered from both human and text based resources. The program needs to improve its incentives before it can really focus on promotion. AFDs seem to appeal to landowners who are interested in formal land conservation, but do not want the permanent restrictions of conservation easements.

1.0 Introduction

The purpose of this study is to evaluate the Virginia Agricultural/Forestral District (AFD) Program through a local study in Staunton City and Augusta County, VA for the purpose of gaining perspective from landowners who are current AFD members. The goal is to utilize landowner feedback to determine areas in which the AFD program can improve and to define optimum techniques for promoting the program to landowners who are not currently members. To provide proper context and supplement the analysis of the AFD program, Virginia conservation easements and AFD acreage changes throughout the state will also be discussed. The conclusions drawn from this analysis may or may not apply to other areas in the state of Virginia that have AFD programs. It is the hope of the author that the findings and recommendations generated by this study will prove instrumental in increasing the number of acres protected in Virginia by AFDs. This can only be achieved by improving the AFD program and promoting the program more successfully.

2.0 The Agricultural/Forestal District Program

Virginia landowners and local governments were provided an important tool when the Virginia General Assembly passed the Agricultural and Forestal District Act in 1977. According to the Code of Virginia, the purpose of the AFD Act, an enabling piece of legislation, is to, “provide a means for a mutual undertaking by landowners and localities to protect and enhance agricultural and forestal land as a viable segment of the Commonwealth's economy and as an economic and environmental resource of major importance” (Code of Virginia, 15.2-4301, 1977) The AFD program is administered by the government of its locality.

Virginia characterizes the purpose of an Agricultural District Program as a means to “conserve, protect, and encourage the development and improvement of agricultural and forestal products, and conserve and protect agricultural and forestal lands as valued natural and ecological resources which provide essential open spaces for clean air sheds, as well as for aesthetic purposes” (Augusta County, 2013). In exchange for the landowners agreeing not to convert their farm, forestland and other open space lands to more commercial uses for the agreed term, the locality and Commonwealth agree not to take actions or make infrastructure investments that will place pressure on the landowner to succumb to economic or non-agricultural development (VCC). A district constitutes a voluntary agreement between landowners and the government that no new, non-agricultural uses will take place in the district. An AFD provides stronger protection for farmers and farmland than traditional zoning.

As expected, there are terms and eligibility requirements associated with this program. When the landowner decides to become an AFD member, an agreement is made with the local government as to the length of the term. “Landowners agree not to subdivide their land to a more intensive non-agricultural or forestal use during the term of the district” (VCC, 2013). In line with the enabling legislation, applying landowners and the government of the locality choose a term of between 4 and 10 years. A district must have a minimum core of 200 acres, in contiguous parcels while non-contiguous properties may be incorporated into the District provided that their boundary is within one mile of the boundary of the minimum 200-acre core or adjacent to land within one mile of the core (VCC). “Once the 200-acre core is established, there is no minimum parcel size and no minimum number of landowners. There is also no maximum size for a given district” (VCC, 2013). Landowners applying for a district must provide a description and map of the district, total acreage, acreage and signature of each landowner, proposed conditions, and proposed review period. The application is reviewed by the county’s Agricultural District Advisory Committee, the Planning Commission, the Board of Supervisors and the public. The Board of Supervisors must act on the application within 180 days. At the end of the agreed term, the landowners choose whether or not they would like to renew their AFD membership. If a landowner chooses not to renew, his/her land is removed from the district with no penalty assessed to him/her.

3.0 Conservation Easements

Another widely used land conservation tool in Virginia is the conservation easement. There are two legislative acts in the Virginia Code that pertain to conservation easements. These are the Virginia Open-Space Land Act and the Virginia Conservation Easement Act, enacted in 1966 and 1988 respectively. An open-space easement is defined as, “a nonpossessory interest of a public body in real property, whether easement appurtenant or in gross, acquired through gift, purchase, devise, or bequest imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural or open-space values of real property, assuring its availability for agricultural, forestal, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural or archaeological aspects of real property” (Code of Virginia, 10.1-1700, 1966). The majority of conservation easements in the state are administered by the Virginia Outdoors Foundation (VOF). “The VOF is Virginia’s leader in land conservation, protecting about 675,000 acres in 107 counties and independent cities. VOF is a public organization, created by the Virginia General Assembly in 1966” (VOF, 2013).

While the ultimate purpose of conservation easements is to conserve and protect natural, open-space land like AFDs, there are substantial differences between these two conservation tools. “An open-space easement is a legal agreement between a landowner and qualified easement holder, such as the VOF. The easement limits present and future property development rights. It allows landowners to live on the property and use it for compatible purposes, such as farming, forestry and recreation, but protects it as well. The

easement is legally recorded and bound to the deed of the property permanently” (VOF, 2013).

Along with that perpetuity is land monitoring by the easement holder that is stricter than AFD monitoring. This is to ensure that the land is kept in its intended state as detailed in the legal agreement. Whereas an AFD is an agreement collaboratively developed among landowners requiring a contiguous core of 200 acres, and much smaller parcels of land can qualify for easement donation if the land meets certain criteria. According to the VOF, “Easements on properties less than 50 acres in size must contribute to or add to a designated conservation resource and provide a high level of protection for the identified conservation values of the property to be considered for acceptance.” Although the accepted property size can be more liberal, easements present more specific provisions than AFDs when it comes to division of land, dwellings, structures and other restrictions. Some of the most notable differences between easements and AFDs are the attractiveness of landowner incentives that easements provide, the level of protection guaranteed by easements and the fact that perpetual easements do not require a tedious renewal process. These incentives and associated landowner benefits will be discussed in further detail later in this paper.

4.0 Localities of Focus

The purpose of this section is to provide an explanation of the current state of AFDs for each of the localities of focus. Although the charts represent data from 2009, all districts listed in the two localities were still active at the time of this study. Both Augusta County and the City of Staunton are home to four AFDs as indicated in Table 1 below taken from a study done in 2009 by the Valley Conservation Council (Hollberg, Knicely, & Templeton, 2009, p. 9). As shown in the table, of all the localities making up the Shenandoah Valley region, Augusta County has the fourth-most number of acres protected by AFDs with approximately 15,385. On the other hand, the City of Staunton has considerably less acres in AFDs, with approximately 2,532. As of the 2009 VCC study, Staunton was the only city-based locality having AFDs in the state of Virginia.

Table 1: Status of Agricultural/Forestal Districts in the Shenandoah Valley Region (Hollberg, et al, 2009, p. 9)

<i>Locality</i>	<i>2009 Districts</i>	<i>2009 Acreage</i>	<i>2002 Acreage</i>
Alleghany	---	---	---
Augusta	4	15,385	15,574
Bath	---	---	---
Botetourt	---	---	---
Clarke	1	28,000	28,261
Frederick	3	7,817	13,585
Highland	---	---	---
Page	1	1,243	1,912
Rockbridge	7	6,097	5,236
Rockingham	9	22,395	26,218
Shenandoah	21	41,392	43,138
City of Staunton	4	2,532	2,321
Warren	3	11,112	9,424
<i>Valley Totals</i>	<i>53</i>	<i>135,973</i>	<i>145,669</i>

It is worth noting that both Augusta County and the City of Staunton saw a change in AFD acreage from 2002 to 2009. Augusta County saw a decrease of 189 acres while Staunton saw an increase of 211 acres. While these numbers may seem minimal when considering the total acreage in each district, the decline in total AFD acreage for the Shenandoah Valley region is much more concerning. This region saw an overall decrease of nearly 9,700 AFD acres during the seven-year time frame of this study. Gaining landowner perspective, determining areas for AFD program improvement and formulating optimal program promotion strategies are keys to addressing and understanding this decline in acreage. Additionally, the understanding of conservation easement activity during this time period is also a key consideration when making determinations about the AFD program. Observing the acreage trends or lack thereof in other areas of the state also warrants consideration when making determinations about the

program. Those two aspects will be discussed further later in this paper. This study provides a timely analysis of the AFD program using landowner perspective and considers input from sector experts. The landowner feedback accessed by this study could be an asset to AFD administering agencies statewide.

The following AFDs are found in Augusta County: Crimora-Madrid, Middlebrook, Middle River, and North River. The table below (Hollberg, et al, 2009) illustrates the number of acres in each district. The Middle River district is the largest, while Crimora-Madrid is much smaller than the other three listed.

Table 2: Augusta County Agricultural/Forestral Districts (Hollberg, et al, 2009, p. 19)

Augusta	
Crimora-Madrid	648.4
Middlebrook	3,850
Middle River	5,694.3
North River	5,192
<i>County Total</i>	<i>15,384.6</i>

The figure below replicates a map attained from the Augusta County Senior Planner that provides a geographical representation of the locations of each of the districts within the county.

Augusta County Ag Forestal Districts

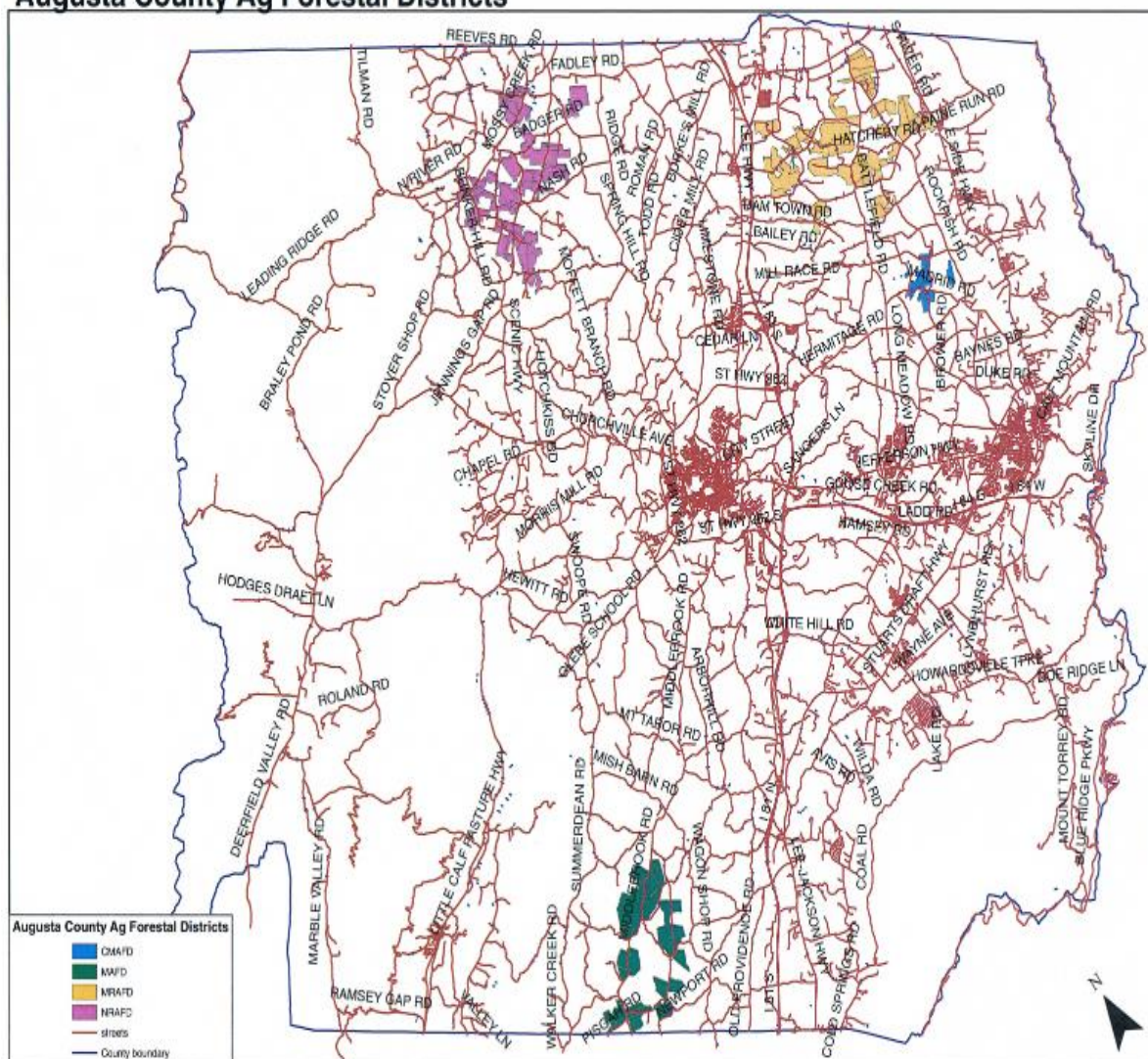


Figure 1: Geographical Representation of Augusta County Agricultural/Forestal Districts (Becky Earhart, March 1, 2013)

The four AFDs found within the City of Staunton are Bell's Lane, Merrifield, M.O. Carr, and Middlebrook. Table 3 below, also taken from the 2009 VCC report, illustrates how the number of total acres is distributed among the districts. The Bell's Lane district is by far the largest district in the City of Staunton while M.O. Carr is much smaller than any of its neighboring districts. M.O. Carr has fewer acres than what is

generally required to form an AFD. However, the locality made an exception due to special circumstances.

Table 3: City of Staunton Agricultural/Forestral Districts (Hollberg, et al, 2009, pp. 20-21)

Staunton	
Bell's Lane	1,662.3
Merrifield	561.8
M. O. Carr	86.4
Middlebrook	221.3

5.0 Growth of Conservation Easements in Virginia

Conservation easement activity in Virginia is worth noting when considering the behavior of the AFD program over the last decade. The number of conservation easements in Virginia has surged upward over the last ten to 15 years. Along with landowner preservation preference, this drastic increase is likely related to the financial benefits that have become available over this time span. The driving financial benefits of perpetual easements largely came to realization in 1999 with the enactment of the Virginia Land Preservation Tax Credit Program. The following is a summary of these landowner benefits detailed as part of a 2007 presentation given by G. Robert Lee, Executive Director of the Virginia Outdoors Foundation. “40 percent of easement value may be used to reduce or eliminate property owner’s owed state income tax and credit in excess of owed tax amount may be sold. More than one-half of all Virginia conservation easements have been recorded since 2000, the effective enactment date of the state’s Land Preservation Tax Credit Program. The value of a conservation easement may also reduce the property owner’s owed federal income tax by up to 50 percent for up to 16 years” (Lee, 2007, pp. 17-18).

Figure 2 below, taken from the National Conservation Easement Database (NCED), shows conservation easement acreage by acquisition date in Virginia since 1968. The most notable rise took place over the last 15 years, the approximate time period since the aforementioned Tax Credit Program was enacted. It was mentioned earlier in this paper that the number of AFD acres in the Valley region had declined by some 9,700 acres from 2002 to 2009. While this decline in AFD acreage was occurring, easement acreage throughout the state was on a tremendous upswing.

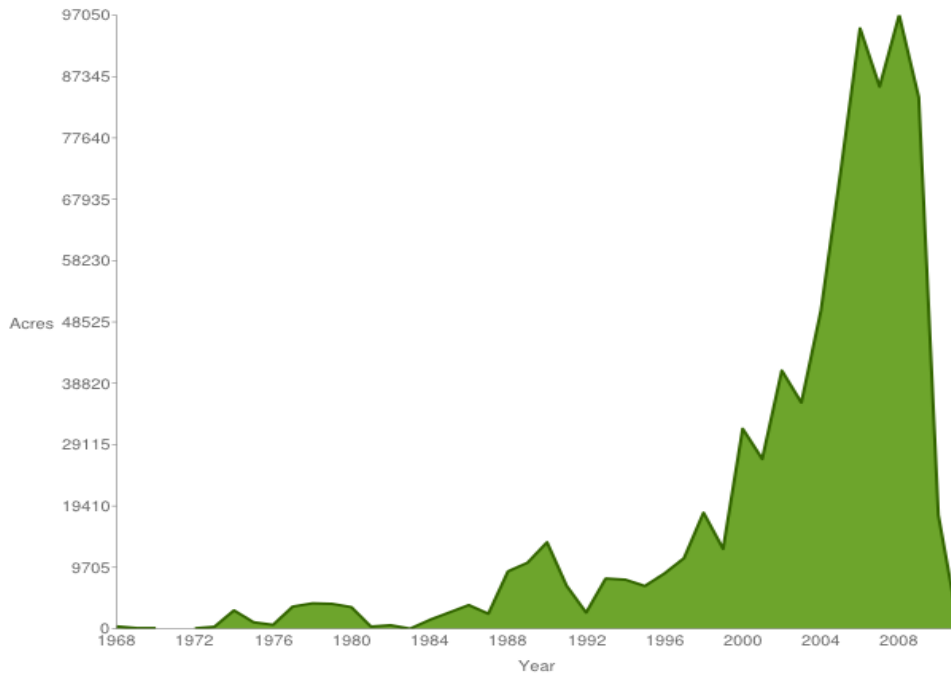


Figure 2: Virginia Easement Acreage Recorded by Year (NCED, 2013)

Between 2002 and 2009 a total of 2,707 easements were acquired which equated to an additional 560,820 acres added to easements (NCED, 2013). Local easement growth followed that same trend. In 2002, the VOF held a total of 5,969 acres in easements in Augusta County (VOF, 2013). By 2009, that number had jumped to approximately 18,501 acres (VOF, 2013).

6.0 AFD Program Benefits for Landowners and Localities

The AFD program provides benefits for both the landowners within a locality and the locality itself. However, it could be argued that the landowner benefits are not as substantial as those provided by perpetual conservation easements. From a financial standpoint, the land in the AFD automatically qualifies for land use value eligibility. This applies even if the locality has not adopted a land use value taxation ordinance. According to Virginia's Use Value Assessment Program (VUVAP), "Virginia law allows *eligible* land in agricultural, horticultural, forest or open space to be taxed upon the land's value in *use* (use value) as opposed to the *market* value" (VUVAP, 2013). For example, if a field was able to produce corn for a total value of 200 dollars, the landowner would be taxed based upon that amount as opposed to the field's market value. While this guaranteed eligibility is favorable to participating landowners, most agricultural lands can qualify for land use taxation annually regardless of AFD status. In other words, the landowner can still get this same advantage without having to impose restrictions on their land.

Being an AFD member also offers the landowner protection and a feeling of security. As a member, the landowner is protected from most nuisance ordinances and most cases of eminent domain. Examples of possible nuisance ordinances are as follows, if there was an attempt to implement a local regulation prohibiting a farmer from stirring dust or spreading manure, the farmer would be protected from that regulation as part of being an AFD member. The landowner is also protected from development pressure that may be placed on them by neighboring areas. With their land being in a district there is an assurance that their land will be taken into account during local planning decisions and

that the land in the district will be only for rural uses for the length of the term. Also, for landowners who are not comfortable with the permanent loss of development rights and more comprehensive restrictions of conservation easements, AFDs provide a more relaxed alternative to protecting and preserving their land.

The localities benefit from having an AFD program as well. While the benefits to the localities could be seen as more subjective, there are still benefits, nonetheless. In the 2009 survey of government staffers done by the VCC, one commonly cited benefit was the preservation of open space and family farms within the district (Hollberg et al, 2009). Other commonly cited benefits of having an AFD program were said to be “carbon sequestration, air quality, water quality, animal habitat, and protection of agricultural and timber production” (Hollberg, et al, 2009, p. 8).

7.0 Conservation Easement Benefits for Landowners and Localities

Without question, the aforementioned financial benefits provided to landowners as a result of entering into a perpetual easement agreement greatly outweigh any financial benefits the AFD program offers. Easements also provide other benefits to participating landowners in addition to the financial incentives. For clarification, there is a possibility of entering into a term easement, similar to the time frame of an AFD, but tax laws require the perpetual designation in order for the landowner to qualify for the tax benefits (Internal Revenue Code, Section 170(h)(2), 1980). From a non-monetary standpoint, some landowners want to make sure their land is preserved in its current state for the long term. With the permanence of a perpetual easement, this desire can be fulfilled. Easements also offer stronger protection against development pressure than AFDs and do not require a cumbersome, time consuming renewal process that places strain on the landowners and administering agencies.

Easements provide benefits to their locality that are similar to what AFDs provide. However, while AFDs only ensure the land in the district will be preserved for a short term, the preservation is perpetual with permanent easements. For the locality, this means that for every acre preserved in perpetual easements now, there will be at least that many acres or more preserved in the future. This ensures long term ecological and environmental benefits for the locality.

8.0 Previous AFD Studies and the Need for Gaining Landowner Perspective

From a stewardship and administration standpoint, it would be beneficial to both landowners and administrators to determine areas needing improvement within the AFD program. Also, it would be beneficial to these same parties to determine optimal methods for promoting the program to landowners who are not currently AFD members. The evaluation and understanding of these two topics could lead to an increased number of protected agricultural acres via AFD formation in the future as a result of implemented program improvements and improved program promotion. While conservation easements are generally more attractive, some landowners prefer a short term, less restrictive conservation approach that would allow them to collaborate with their neighbors on land conservation initiatives. Some landowners would be open to formally preserving their land but do not want to permanently forgo development rights in exchange for compensation. In order to determine how to best cater to these landowners, it is essential to gain landowner perspective from current AFD members and to consider the input of sector experts.

As mentioned earlier in this paper, the VCC administered a survey in 2009 to government staffers throughout the state. While the exact number of respondents was not disclosed, it included surveying 30 localities that were confirmed as having AFDs. 100 percent of AFD localities surveyed responded. “The purpose of the study was to determine the extent of agricultural and forestal districts in the state, learn more about the methods that localities use to administer districts, and update data for districts in the Valley region” (Hollberg, et al, 2009, p. 1). As a follow up to the survey, the VCC hosted a workshop to further discuss key issues regarding the AFD program. The

following is a summary of the workshop and survey findings from Hollberg, et al, 2009. When asked about the future of AFDs, none of the survey respondents felt the districts would totally go away. The general sense was that they would decline over time or remain steady. Based on the survey, related research and the workshop the following recommendations were made for improving the AFD program:

- The provision of additional incentives to landowners willing to limit development should be explored.
- Along with the proactive promotion of the program, streamlining the required AFD process for landowners and making it more cost effective for governments were suggested.
- It was also suggested to educate the landowners on the relationship between conservation easements and AFDs. Localities that do not currently have AFDs should be encouraged to consider this option while the potential of local AFD programs should also be explored.
- Lastly, it was determined that a support network for localities with AFD programs may be beneficial.

While all of this information is valuable, and the survey did accomplish its purpose, landowners in the districts were not solicited for their feedback as part of this study. Currently, a formal collection of data representing AFD landowner perspective does not exist.

Program promotion is an integral part of the AFD program since this method of conservation is driven and organized by landowners. As a result, another focus of the

VCC survey was to determine how many localities used promotion methods for raising the awareness of and educating landowners. Specifically, the primary methods for promotion and the challenges with promotion were examined. The tables below taken from the report represent the findings associated with these two areas of focus. First, Table 4 represents the percentage of localities that use the corresponding promotion methods. “Overall, it was found that 63% (19/30) of localities with districts use some form of promotion” (Hollberg, et al, 2009, p. 6). Public meetings, the most popular method of promotion, were used in 37% of localities. The number of localities not using any form of promotion accounted for the same percentage.

Table 4: Primary Methods of AFD Promotion (Hollberg, et al, 2009, p. 6)

<i>Promotion Method</i>	<i>Percentage of Localities</i>
Public Meetings	37%
Mailings	27%
Pamphlets	27%
None	37%

Also taken from the report, the data in Table 5 below shows the primary challenges of promoting the program encountered by the 19 localities that actively use some form of promotion. As is evident, the lack of landowner interest and staff and resource issues were the dominant reasons for making program promotion difficult.

Table 5: Challenges with AFD Promotion (Hollberg, et al, 2009, p. 6)

<i>Challenge</i>	<i>Percentage of Localities</i>
Lack of interest (landowners)	32%
Staff and Resources	26%
District Attrition	16%
Lack of interest (local government)	11%

9.0 The Landowner Survey

In order to get a picture of the current landowner perspective, a JMU IRB-approved and mailed survey was created for the purposes of this study. The survey consisted of ten multiple choice questions with all questions allowing space for an additional written response. The questions included in the survey were created with consideration given to those asked in the VCC report and with input from those on the author's academic committee. The survey is included in its entirety in Appendix C of this paper. As mentioned earlier, in order to promote local relevance and to ensure thoroughness, the survey was distributed to all current AFD landowners whose protected land lay in either Augusta County or the City of Staunton. The landowner information and the geographical locations of these districts were acquired from the planning departments of those two localities and from an online resource, the Virginia Mass Appraisal Network (<http://www.vamanet.com/cgi-bin/HOME>).

The questions selected for inclusion in the survey were those that would reveal what the landowners saw as program areas needing improvement and how they thought it best to promote the program to other landowners who were not AFD members. First, in order to address the issue of program improvement, landowners were solicited for their views regarding benefits and drawbacks of the program in its current state. In addition, the landowners were asked if they had encountered complications of any kind as a direct result of having their land in an AFD. These questions directly addressed the issue at hand and provided first hand perspective representing what landowners saw as areas needing improvement. Awareness of complications experienced would provide administering agencies a remedial foundation to build upon when improving the program

moving forward. Next, to achieve the goal of improved promotion strategies, those surveyed were asked how they first heard about the AFD program and what they hoped to gain by having their land in an AFD. Their input regarding the single-most effective way to raise program awareness was also solicited. Learning how they heard about the program would provide insight into the best ways to promote it to non-members.

Becoming privy to what landowners hoped to gain from being an AFD member would provide valuable information as to possible selling points for marketing the program to others that may share that same mindset. Lastly, the remaining survey questions aimed to determine how many acres the landowners had in their locality's AFD and whether or not they had a forest management plan in place. Whether or not the landowners planned to renew their contract at expiration was included in the survey as well. Also, their thought on whether or not AFDs would thrive in their locality in the future was the focus of one question. In sum, the answers to these final questions were critical to determining if there were any underlying trends or relationships between factors such as landowner acreage and perceived AFD benefits.

10.0 Survey Results and Analysis

In this section, the survey results will be analyzed and the focus will be on three main areas of the survey, including landowner perceived AFD program benefits, landowner-perceived AFD program drawbacks, and promotion methods suggested by the landowners via their survey responses. Ultimately, the final survey response rate was approximately 18 percent with 16 landowners responding out of 89 surveys delivered. Although the survey response rate was low and not statistically conclusive, the survey results provided a useful snapshot of landowners' opinions regarding the AFD program. That low response rate itself is worth noting when determining areas for program improvement. That particular detail will be discussed further later in this paper. Even with limited responses there were still dominant trends evident in the landowner feedback. Overall, it was clear that the program was seen as a valued conservation tool from the landowners' perspective. It is also clear from the responses that there is a strong sense of farming pride and a dedication to collaborative land conservation among the landowners who are members. The number of acres the landowner had in the AFD and forest management plan status will be summarized, but these two aspects were not seen as drivers of any specific trends pertaining to the aforementioned three main areas of interest. Collectively, the total number of acres reported by the respondents was 2,088. This represents approximately 12 percent of the combined total AFD acreage located in Augusta County and the City of Staunton. Based on the reported acreage, the average number of acres in an AFD for each respondent was approximately 131. Only one person responded that he/she had a forest management plan in place. It was stated that he/she

worked with the Verona United States Department of Agriculture (USDA) office to implement this plan.

First, the benefits cited by the landowners will be explored. While there were very few drawbacks cited, there were a number of program benefits perceived by landowners. Figure 3 below provides a visual representation of how these perceived benefits compare to one another based on the number of landowner votes submitted for each.

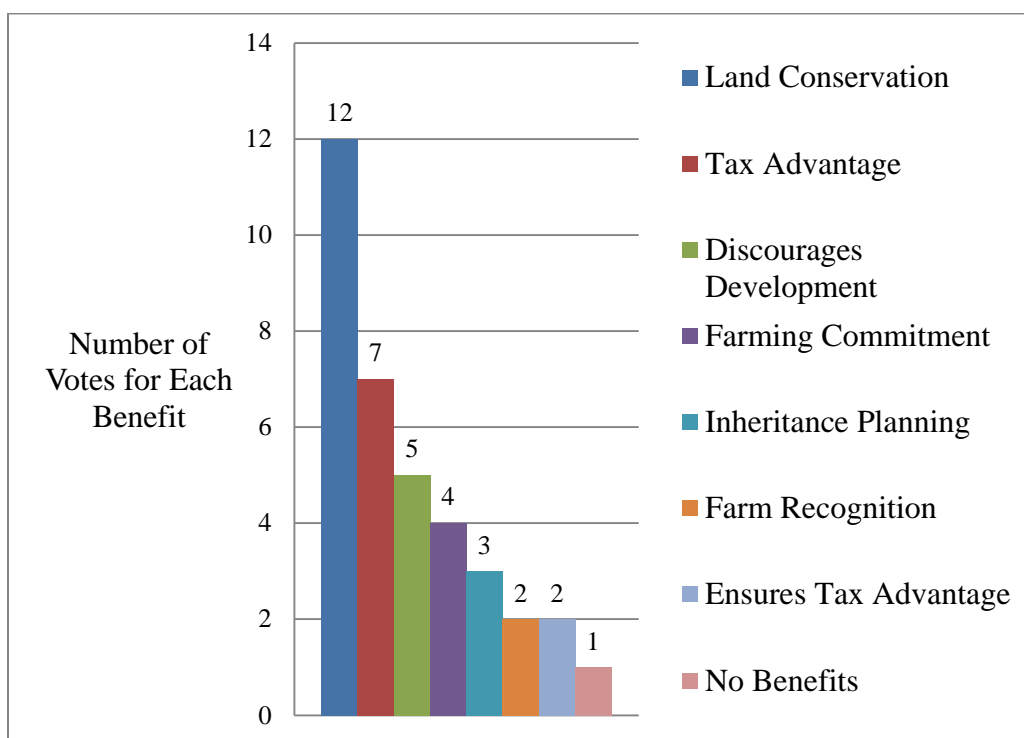


Figure 3: Landowner-Perceived AFD Benefits (Tax Advantage, Land Conservation, Inheritance Planning, and No Benefits were the options given. Landowners were instructed to choose all that applied.)

Land conservation was seen overwhelmingly as the number one benefit voiced by landowners (12 votes). The tax advantage provided for being an AFD member received the second most votes (7), while the associated development restrictions were a close

third (5). An interesting fact about the chart is that the benefit receiving the fourth most votes (4), labeled as *Farming Commitment*, was not an option on the survey. These four votes came from landowners who added this to the comments line in the perceived benefits section of the survey. Given that 25 percent of respondents entered this response manually reinforces the fact that heritage and pride are traits found in a notable portion of AFD members. This seems to indicate that these AFD landowners are very passionate about keeping the family farm going and publicizing their commitment to farming.

Some AFD members were inclined to share anecdotal information in addition to their survey responses. One Augusta County landowner expanded on what he/she perceived to be the greatest benefit of the program: the ensured land use eligibility. The landowner said that should there be land use policy changes that are detrimental, he/she would have a leg to stand on and be protected from these changes as a result of being an AFD member. It was also evident that the landowner was proud that his/her land was united with his/her neighbors' in a collaborative effort to support land conservation and show a commitment to farming. Other benefits receiving votes were inheritance planning, farm recognition, and the fact that AFD members automatically qualify for land use eligibility. Only one respondent voiced that he/she did not see any benefits provided for being an AFD member.

Next, the program drawbacks perceived by the surveyed landowners will be explored. The drawbacks are represented in Figure 4 below.

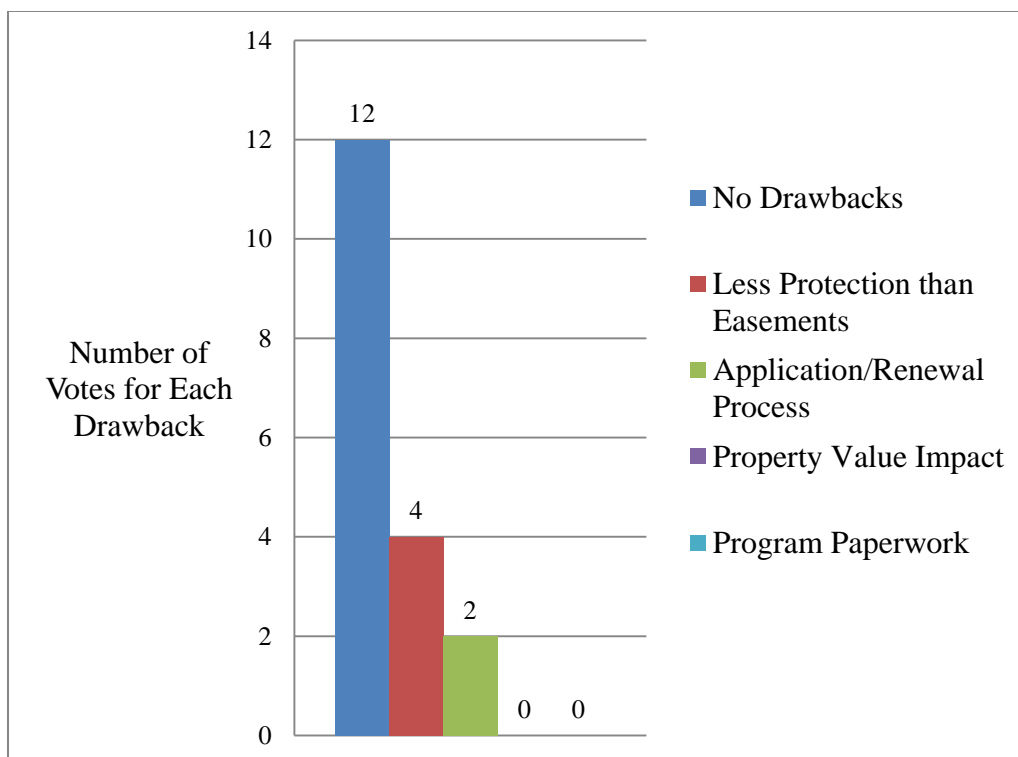


Figure 4: Landowner-Perceived AFD Drawbacks (Application/Renewal Process, Less Protection than Easements, Property Value Impact, Program Paperwork and No Drawbacks were the options given. Landowners were instructed to choose all that applied.)

The majority of respondents replied that they did not perceive any drawbacks associated with the program (12 votes). This seems a likely response coming from most current AFD members. If these landowners saw the program as having lots of drawbacks they would not have become members in the first place. However, some members may have joined and drawbacks were realized subsequent to joining. The feedback from these types of members is what will shed light on areas for program improvement. The only two drawbacks cited accounted for six votes collectively. These drawbacks were related to the amount of protection AFDs offer in comparison to aforementioned conservation easements (4) and the district application/renewal process (2). The four votes related to the protection level of AFDs could indicate that at the time of renewal that landowner

will opt to leave the district and implement an easement as an alternative. One survey respondent voiced this exactly in comments on the survey, saying that his/her being in an AFD was a stepping stone to moving into an easement. No one who responded had a problem with property value impact or program paperwork.

The issue of program promotion and related methods receiving votes is presented in Figure 5 below. Two approaches were seen equally as the best ways to promote the program.

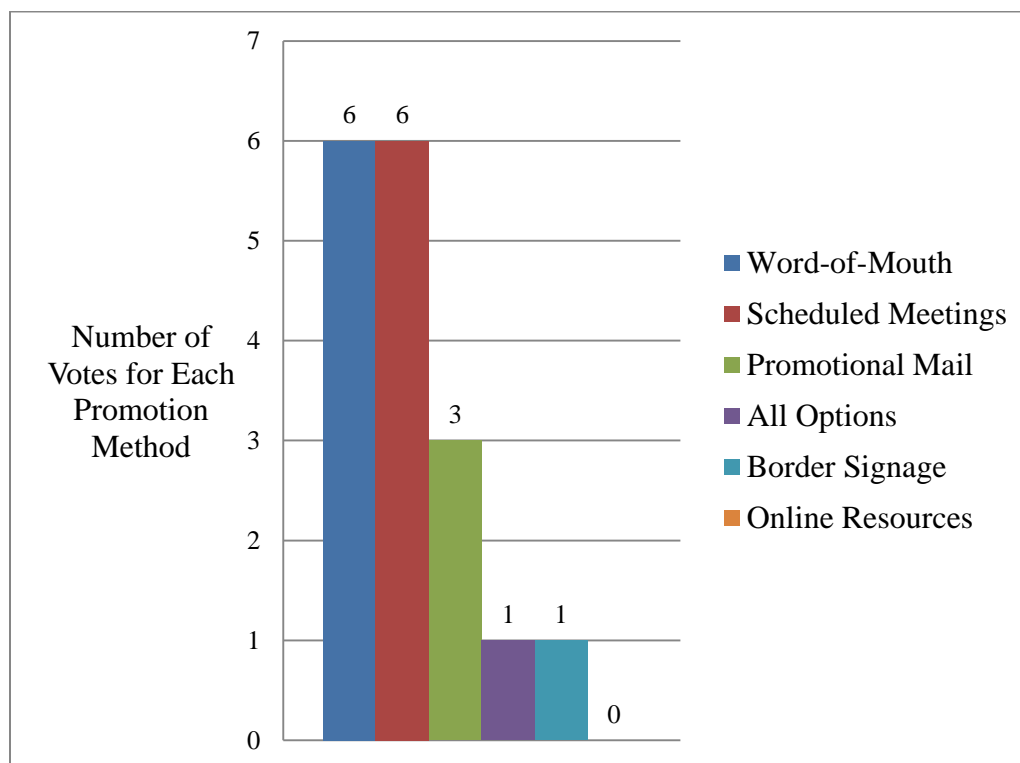


Figure 5: Landowner AFD Promotion Suggestions (Word-of-Mouth, Promotional Mail, Online Resources and Scheduled Meetings were the options given. Landowners were instructed to choose one.)

According to the survey findings, the majority of respondents first heard about the program by word-of-mouth. This is consistent with what they considered to be the best way to promote the program and raise program awareness to other landowners. Word-of-

mouth received six votes, as did the idea of having scheduled meetings. When considering how the AFD program would be best promoted, these responses provide valuable insight to administering agencies. Promotional mailings received the second most votes (3). The final two promotion methods receiving votes were suggested as comments by the respondents. One respondent suggested that placing signage at district borders would help raise awareness and encourage others to consider joining. Another felt that word-of-mouth, scheduled meetings, promotional mail and online resources were all needed in order to properly promote the program using a multi-faceted approach. This is represented by the designation *All Options* in the figure. One significant detail evident in the figure is that not one person thought online resources would be beneficial. In a day and age where so much onus is placed on electronic marketing and communication no one thought that the AFD program should be promoted in this way. Perhaps this could also relate to the age of the respondents, however, landowner age was not a variable of focus for this study.

Regardless of the fact that the survey response was low, it is still clear that this pool of respondents prefers a more traditional approach to promoting the program. This is also reflected in the landowner responses to how they would like the survey results to be delivered to them. Every person that wanted to see the study results requested that they be sent a hard copy by mail. No one requested that they be sent an email containing the results. The traditional preference of these landowners was also the reason for using a mailed survey approach for this study as opposed to attempting to use an electronic survey tool. This information will too prove valuable to administering agencies when considering how to communicate AFD program promotion material.

As part of this study, in addition to the mailed survey, an AFD authority from each locality of focus was solicited for his/her feedback regarding the topics of AFD program improvement and program promotion. According to Becky Earhart, Augusta County Senior Planner, the AFD program suffers because, “There is not enough landowner benefit to overrule the land restrictions they impose on themselves by becoming an AFD member. Other than ensuring their eligibility for land use taxation, which Augusta County has never considered eliminating, there is no added financial benefit provided to the landowner. The district formation is cumbersome and a bit of a headache and farmers are too busy to put a lot of time into establishing it” (Earhart, 2013). Earhart cited two main issues that make program promotion to the agriculture community challenging. These issues are the aforementioned lack of landowner incentives and the fact that remote, county land is not subject to intense development pressure. Sharon Angle, Director of Planning for the City of Staunton, also provided feedback regarding the two previously mentioned topics. When asked how the program could be improved Angle replied, “The process written so many years ago is a cumbersome nightmare to go through. It needs to be simplified by reducing advertising requirements, shortening the time frame in half, and allowing jurisdictions to charge the true cost of the program” (Angle, 2013). With regard to program promotion, Angle felt that having public meetings at convenient places would be beneficial. As part of these meetings she suggested that the program be explained for those attending and that there should be an allowance for questions. Although the number of AFD acres in the Shenandoah Valley region has declined since 2002, it appears based on the survey

feedback that at least some current AFD acres will likely remain protected. All but one respondent said that they will renew their AFD contract when the time comes.

11.0 Recent AFD Acreage Activity in Virginia

Before attempting to make determinations about the current state of the AFD program, it must be understood that acreage activity and related program participation levels appear to be highly volatile when comparing different localities. This makes determining reliable trends a complex issue. To demonstrate these complexities, some notable Virginia AFD acreage changes that occurred from 2009 to 2012 will be discussed. The following numerical figures represent a summary of findings taken from acreage data included in the VCC report (Hollberg, et al, 2009, p. 9) and a 2012 report compiled by the Virginia Department of Agriculture and Consumer Services (VDACS, 2012). Figure 6 below provides a visual representation of Virginia counties and highlights the localities of focus in the following discussion.

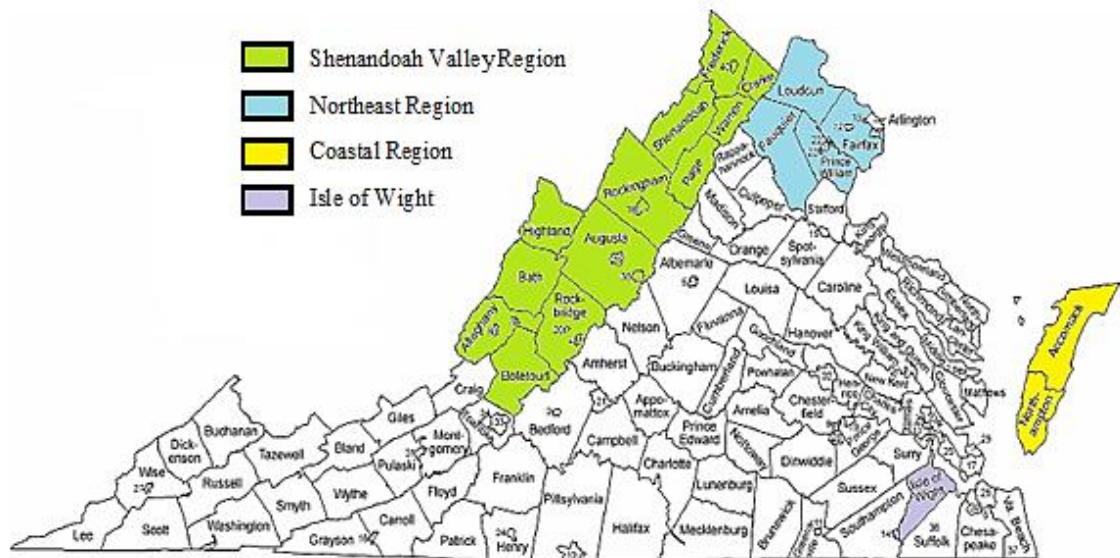


Figure 6: AFD Acreage Volatility: Comparative Virginia Localities (Waterproof Paper.com 2013, figure edited by Martin Driver)

The significant drop in AFD acreage for the Shenandoah Valley Region, highlighted in green above, from 2002 to 2009 was discussed earlier. For that same region from 2009 to 2012, there was a minimal, combined increase of 650 acres. Comparatively, four

counties in close proximity to the northern portion of the Shenandoah Valley Region, Fairfax, Fauquier, Loudoun and Prince William, named the *Northeast Region*, combined for an increase of more than 9,400 acres during that same time period. Those four localities are designated with blue on the map. Along the eastern shore of Virginia, there are two adjacent localities that are uniquely located and whose acreage changes during that same time period seem to support a regional trend. The counties of Accomack and Northampton, represented in yellow and named the *Coastal Region*, combined for a significant decrease in AFD acreage of more than 19,000 during that time span. On the other hand, Isle of Wight County, shown in purple, located in the far southeastern portion of the state, seems to thwart that regional rational. No localities adjacent to this location have AFDs, but Isle of Wight saw an increase in AFD acreage of more than 11,000 from 2009-2012. It could be argued, based on these examples, that the behavior of AFD programs vary greatly based on the locality they are administered by. The previous summary could be an indication that each locality having AFDs should carry out an AFD landowner study such as this one in order to accurately make determinations about their respective programs. As an alternative, distributing a broader survey to all AFD localities could also be an effective approach to increasing understanding about AFD behavior in different Virginia localities.

12.0 Conclusions and Recommendations

In this final section, an attempt will be made to address the two questions that primarily drove this study. Those questions relate to areas for improving the AFD program and how to best promote the program to current non-members. While the suggestions in this section are directed primarily at Augusta County and the City of Staunton, these suggestions could be of value to other AFD localities in the state. However, due to the location-specific behavior of AFD programs, these suggestions should not be treated as statewide, universal remedies. As mentioned in a previous section, the lack of survey responses produced only a snapshot regarding how current AFD members felt about the program. No statistical conclusions can be drawn from that level of survey participation. However, this study may still prove an asset to administering agencies and anyone who has a vested interest in the Virginia AFD program.

With regard to AFD program improvement areas, there are some changes that are readily obvious while others are not. One significant problem with the program is its lack of landowner incentives. This shortcoming is echoed by the survey responses and by sector experts. Since the landowners have more attractive conservation tools at their disposal such as conservation easements the AFD program suffers. Even if the landowner does not want to be in an AFD they can still apply for land use designation without imposing restrictions on their land by participating in a formal conservation arrangement. If changes were made to land use designation qualifications, this could have a positive effect on AFD program participation. Limiting land use eligibility to AFD or easement members is a change worth considering. Richardson echoed this in his

article, *Beyond Fairness: What Really Works to Protect Farmland*. According to Richardson, “In short, the drawback to use-value assessment at present is the lack of discrimination in the application” (Richardson, 2007, p. 176). He goes on to say, “Additionally, low qualification hurdles for differential assessment limit the effectiveness of agricultural and forestal districts” (Richardson, 2007, pp. 176-177). He sees the benefits of agricultural and forestal districts as lacking since one of the most significant benefits is available without joining a district. He concludes, “One could enhance agricultural and forestal districts further by tying qualification for differential assessment to inclusion within an agricultural and forestal district” (Richardson, 2007, p. 178). Moreover, if the landowner has an interest in financial incentives the AFD program pales in comparison to what perpetual easements can offer. While most landowners surveyed did not see any program drawbacks, the drawback receiving the most votes was related to how easements offer superior protection. One conservation expert also tends to agree with the superiority of easements when compared to AFDs. According to Robert Whitescarver, a Natural Resources Conservation Service veteran, “Currently in Virginia, being in an AFD negatively affects the value of an open space easement. I would not recommend someone join an AFD if they were thinking about putting an easement on their farm” (Whitescarver, 2013).

Another area in which the AFD program should be improved is the minimum acreage requirement for landowners. This is not something that was asked as part of the survey, but it is an improvement that is not as obvious as the lack of landowner incentive. As it stands now, the 200-acre contiguous core requirement likely shuts out some landowners who would like to collaborate with neighbors and participate but collectively

cannot meet this acreage requirement. As mentioned earlier, conservation easements will allow for a parcel under 50 acres if certain requirements are met. The AFD program should have similar flexibility. To determine if this minimum acreage requirement poses a significant problem administering agencies should ask this question at scheduled meetings where non-AFD members are attending. Lowering this requirement could lead to more acres protected via AFD formation. On the other hand, reducing this minimum requirement could make administering the program more difficult. By implementing this reduction, this could lead to many small parcels that are spread throughout the locality belonging to different landowners. This potential change does seem promising, but it would require carrying out a cost/benefit analysis by administrators to determine if the potential change would be warranted.

Program promotion presents a formidable challenge as well. In order to effectively promote anything there has to be something that really draws the audience to what is being promoted. There has to be something distinctive that separates the promoted item from other alternatives. Aside from the facts that AFDs offer a more relaxed conservation approach and a guarantee of land use eligibility, there really is not any financial benefit to those who may participate. Comparatively, it seems that conservation tools offering substantial benefits to landowners tend to protect more acres. An argument could be made that the negative correlation seen between AFD and easements acreage totals between 2002 and 2009 supports this. After all, this trend was realized after the aforementioned Tax Credit Program was enacted. While AFD acreage was plummeting during this time span conservation easement acreage was rising exponentially. It could be that the AFD program is not something that landowners are

excited about, not even the majority of current AFD members. It is difficult to generate excitement when there is a lack of incentive. As mentioned earlier in this paper, the VCC report findings support this as well. According to that study, the number one challenge with promoting the program was lack of landowner interest. Promotion strategies for the AFD program can only be optimized if the program itself is improved first. Once there is more incentive for the landowner the promotion suggestions set forth by the survey respondents can be more seriously considered.

Although there is lack of real incentive, there are still some current aspects of the program that can be promoted. Given that AFD members have such a sense of farming pride, the marketing of the program should cater to that feeling. In order to increase long-term, sustained, participation in the program, there is a need to focus on those eligible landowners who do not want easements. Along with this, landowners need to be educated on the differences between the two. AFDs should be promoted in a way that appeals to those landowners who want to make it known that they are committed to conservation and limited development. The previously discussed survey results support this as well. Regularly scheduled meetings, perhaps quarterly, would help to educate landowners on their conservation options. Current AFD members should be invited to attend and speak about how they are united with their neighbors in their district and encourage other landowners to take initiative. Additionally, the idea of placing AFD border signage is a step in the right direction. Signs should be placed at AFD borders, specifically those having road frontage. The signs should explain that the land behind them is an active AFD and the signs should have contact information for the administering agency should someone want to know more about AFDs. As to how these

signs are funded and created, this would have to be determined by local administering agencies.

There is still some question as to what AFD program improvements could be made in order to make it a more attractive conservation option to landowners. There is a definite need for enhanced landowner incentive whatever that may be. However, it would take substantial incentive upgrades to compete with easements when those landowners considering a conservation tool are financially driven. That said, there will likely always be some landowners, as is evident today, who are solely interested in the communal aspect of AFDs as opposed to the financial benefits of conservation easements. Not every landowner who wants to discourage development will implement a conservation easement. Based on the history of the AFD program, to the extent of which was studied in this paper, it seems that for the foreseeable future there will be some landowners who prefer the AFD option. In the end, there is no competitive relationship between easement agencies and AFD agencies. What is most important in the world of resource management, specifically land conservation, is that the landowner uses some sort of tool to preserve that resource whatever it may be. In sum, any formal land conservation approach is still better than allowing widespread development to devour our valued agricultural land.

Appendix A

Dear Martin,

I want to let you know that your IRB protocol entitled, “*Agricultural/Forestal Districts: Surveying AFD Landowners in Augusta County and the City of Staunton to Determine Areas for Program Improvement and Program Promotion Strategies*” has been approved for you to begin your study. The signed action of the board form, approval memo, and close-out form will be sent to your advisor via campus mail. Your protocol has been assigned No. 13-0327. Thank you again for working with us to get your protocol approved.

As a condition of the IRB approval, your protocol is subject to annual review. Therefore, you are required to complete a Close-Out form before your project end date. You *must* complete the close-out form unless you intend to continue the project for another year.

An electronic copy of the close-out form can be found on the Sponsored Programs Administration web site at the following URL:

<http://www.jmu.edu/sponsprog/allforms.html#IRBform>.

If you wish to continue your study past the approved project end date, you must submit an Extension Request Form indicating an extension request, along with supporting information. Although the IRB office sends reminders, it is ultimately **your responsibility** to submit the continuing review report in a timely fashion to ensure there is no lapse in IRB approval.

If you have any questions, please do not hesitate to contact me.

Best Wishes,

Carrie

Carrie Tillman

Office of Sponsored Programs

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1031 Harrison Street

Harrisonburg, VA 22807

(540) 568-6872

Appendix B

Consent to Participate in Research

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Martin Driver from James Madison University. The purpose of this study is to gain landowner perspective with regard to the Agricultural/Forestral District (AFD) program. The feedback received from the survey will be used to answer the following two primary questions. First, in what areas can the AFD program improve and why? Second, what are the most effective ways to promote the program to qualifying landowners who currently do not have land in an AFD? This study will contribute to the researcher's completion of his Master's Thesis.

Research Procedures

Should you decide to participate in this research study, you will be asked to sign and return this consent form with the survey once all your questions have been answered to your satisfaction. This study consists of a survey that will be administered to current AFD members whose land is in Augusta County or the City of Staunton. You will be asked to provide answers to a series of questions related to the aforementioned purpose of this study.

Time Required

Participation in this study should require no more than 15 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

There are no direct benefits to the participant for participating in this study. However, given that the AFD landowner perspective gained from this study is not currently available to administering agencies, it would be beneficial to respond. AFDs are vital parts of local land conservation efforts. By participating in this survey you will be aiding in exposing areas for program improvement and determining optimal strategies for promoting the program to other qualifying landowners who are not currently AFD members.

Confidentiality

Your participation in this study is confidential. The results of this research will be presented in a classroom setting as part of the researcher's thesis presentation. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data. It is likely that the results of this project will be disseminated to AFD-administering agencies. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate.

Should you choose to participate, you can withdraw at any time without consequences of any kind.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please see contact information below and bottom of survey document.

Researcher's Name: Martin Driver

Email Address: driverml@dukes.jmu.edu

Questions about Your Rights as a Research Subject

Dr. David Cockley

Chair, Institutional Review Board

James Madison University

(540) 568-2834

cocklede@jmu.edu

Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory

answers to my questions. The investigator provided me with a copy of this form. I
certify that I am at least 18 years of age.

Name of Participant (Printed)

Name of Participant (Signed)

Date

Name of Researcher (Signed)

Date

Appendix C

Agricultural/Forestal District Landowner Survey

Your responses to the following questions are both valued and appreciated. Please circle the appropriate answer. Where possible please add comments.

- 1) How did you first hear about AFDs?

Word of Mouth Valley Conservation Council

Government Agency (please name):

Other _____

- 2) What do you see as being the greatest benefits of having your land in an AFD? Circle all that apply and if other benefits exist please describe.

Tax Advantage Land Conservation Ensures Inheritance Planning

No Benefits

Other (describe):

- 3) What do you see as the greatest drawbacks of having your land in an AFD?

Circle all that apply and if other drawbacks exist please describe.

Application/Renewal Process Less Protection than Easements

Impact on Property Value Paperwork Related to the Program

No Drawbacks

Other (describe):

- 4) How many acres of land do you have in AFDs?

- 5) Do you currently have a forest management plan in place for your AFD? If so, who did you work with to develop the plan?

- 6) What do you hope to gain by having your land in an AFD?

- 7) Have you encountered complications of any kind as a direct result of having land in an AFD?

- 8) Do you plan to renew your AFD contract when the time comes?

Yes No Undecided

If no, please explain:

- 9) Do you think the AFD program will continue to be strong in your locality in the future?

Yes No Not Sure

If no, please explain:

- 10) As a current AFD member, what do you think would be the most effective way to raise the awareness of landowners who are not members? Circle one below.

Word of Mouth Promotional Mail Online Resources Scheduled
Meetings

Other (describe):

Additional Comments Regarding the AFD Program:

I would like to send you the results of this study. Please circle the delivery method you prefer.

Hard Copy by Mail I Do Not Need to See the Results

Email Address: _____

Other: _____

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